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BRIDGING THE ACADEMIC DIVIDE?

Exploratory discourse on the challenges of distance and culture for academic global virtual teams

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Abstract. Global virtual teams (GVTs) have become an industry-wide trend in international business that is widely studied and reviewed. In academia, similar team structures exist in collaborative global research ventures but are rarely studied. This paper is an exploratory examination of the possible similarities and differences that might exist for academic global virtual teams as compared to the industry paradigm. This paper conceptualizes how cultural, linguistic, and technological challenges may hamper academic collaborative success if not acknowledged and addressed.

Résumé. Les équipes virtuelles mondiales correspondent à une tendance dans tout le domaine industriel pour les affaires internationales et elles ont fait l'objet de nombreuses études. Au niveau académique, des structures parallèles existent dans des recherches menées au niveau global mais elles ont fait l'objet de peu de travaux. Nous proposons ici une étude comparative entre les équipes virtuelles universitaires et celles du monde industriel, en termes de similitudes et de différences. Cet article se focalise sur les enjeux culturels, linguistiques, et technologiques qui peuvent entraver le succès de la collaboration académique s'ils ne sont pas suffisamment admis et reconnus.

1. Introduction

Academia, in both the East and the West, has a rich history of scholarly collaboration and is founded on the belief that knowledge is both learnable and transmittable. Beginning in the mid-to-late 19th century and early 20th century, academic discourse benefitted enormously from technological advances in transportation and communication. During this period, a proliferation of scientific and scholarly associations arose, as

well as an increase in academic journals and periodicals. Such trends continue, as twentieth century scholarship saw a substantial growth of collaborative research initiatives across disciplines (Cronin, 2004; Archibugi and Coco, 2004).

Recent advances in information communication technology (ICT) have further facilitated processes of communication between dispersed colleagues and collaborative research initiatives (Archibugi and Coco, 2004). ICT usage has also meant that researchers can work together virtually without ever having to be in the same geographic locale.

Globally distributed academic research teams, like team counterparts in business, may experience similar challenges to those observed and researched in industry yet this issue is not discussed in existing management literature nor do comparative studies exist. This paper is an exploratory examination of possible similarities and differences between academic and industry paradigms; pointing out the need for future research. We conceptualize that academicians who collaborate at a distance face, in particular, challenges in the area of group cohesion, communication, and team leadership due in large part to divergent cultural differences, mental maps, and technologies.

2. Academic Global Virtual Teams

In order to better understand the intricate aspects of global virtual teams, we first define what we mean by this term – a global virtual team is a distinct entity which is organizationally dispersed and whose members come from different geographical locations, may not have a common background, and collaborate using asynchronous and synchronous technologies.

Global Virtual Teams (GVTs), as an industry-wide international phenomenon, have been widely studied. Conversely, academic global virtual teams, and/or academic collaborative processes that are heterogeneous and dispersed in team membership, have rarely been examined or their issues explored. As an exploratory first step to begin to better understand factors that influence academic global virtual research initiatives, it may be useful to examine the industry GVT paradigm to ascertain similarities and differences.

Both academic and industry global virtual teams (GVTs) share certain characteristics; they use ICTs as their primary means of communication; their team work structure is virtual, and team members may differ in national, cultural, and linguistic attributes. Like industry GVTs, heterogeneous academic research team members, individually and as a group, cope with very different challenges than do collocated team counterparts.

Disadvantages can include ineffective decision making process, lessened productivity, miscommunication, and conflicts among team members. Some research indicates that when conventional and virtual teams are compared, virtual teams are not as successful as face-to-face teams (Potter and Balthazard, 2002). As well, Warekentin, Sayeed, and Hightower (1998) indicated that teams that relied wholly on virtual communication reported less satisfaction with group interaction.

Advantages of such teams are that they can enhance creativity and create cultural synergy (Adler, 2002). High performing virtual GVTs in industry successfully create

and maintain a resilient, adaptive learning environment. This may be true for successful teams in academe as well.

In regards to difference, academic research initiatives are typically self-initiated by scholars with shared research interests, self-managed, with self-determined life spans dependant on collaborative achievement (potentially determined by publishing and funding success). Conversely, industry GVTs are generally formed for ad-hoc projects without a history of collaboration. Industry GVT membership is generally designated by external non-members and such teams have finite lifecycles, specific deliverables, and external supervision (Carte, Chidambaram, and Becker, 2006).

This difference – namely self-initiated groups versus imposed/assigned groups may make a difference in regards to team motivation in relationship building and conflict resolution and bears further attention and study.

2.1. DIVERSITY CHALLENGES

In both multidisciplinary and cross-cultural research initiatives, members may differ in regards to normative research approaches, culture and language. Researchers from varying organizational and national cultures may have different methodological preferences and objectives.

Joint research initiatives face difficulties when those involved have different priorities, perspectives, or have an inconsistent understanding of collaborative processes or expected outcomes (Amabile, Patterson, Mueller, Wojcik, et al., 2001). These issues may be amplified when members are geographically separated from each other. Members, individually and as a team, must be willing to initiate and maintain open and responsive communication, address tension and conflict, actively foster knowledge exchange, and cultivate team relations. If not acknowledged and resolved, such dissonance will confound consensus on research design, research objectives, and data collection (Easterby-Smith and Molina, 1999).

3. Challenges of Teamwork

As research teams come together, research momentum may suffer if team functions are not clearly defined or agreed upon. Teamwork is a culturally-bounded concept. The meaning and significance of the concept varies across cultures. Cross-cultural studies of teamwork note considerable variation in defining such aspects as team membership (Pillai & Meindl, 1998), goal setting (Erez & Earley, 1987), and intra-team conflict and social loafing (Earley, 1989; Montoya-Weiss et al., 2001). Furthermore, differences in perceived power or status between members could result in inadequate and/or unclear communication processes. (Easterby-Smith and Molina, 1999)

In addition to the pitfalls that may occur due to cultural dissonance between team members, tensions over leadership may also arise as academic research teams are generally self-managed teams and thus may have less precise leader roles than top-down industry-driven teams. Scholarly teams, and/or certain team members, may also have a history of collaboration which could either foster collaborative relations or, bring “old baggage” if any previous negative feelings persist between team members.

3.1. COMMUNICATION AND TECHNOLOGY CHALLENGES

Researchers collaborating at a distance rely on communication technology to facilitate knowledge exchange, transfer, and sharing. Notwithstanding, computer-mediated discourse differs from face-to-face communication and requires different skill sets. People vary in their use and perception of technology as a medium of communication. In order for team members to work effectively in the globally distributed environment, there must be both a congruence between cultural values and technology values and an appreciation of the cultural and social complexities of such teamwork.

Not all people favor the 'cyberspace' notion of collaboration. It is often seen as less effective, more time-consuming, and prone to misunderstanding. The sense of cohesion and satisfaction with group interaction processes is weaker in virtual teams due to the lack of face-to-face communication (Warekentin, Sayeed and Hightower 1998).

Conversely, some research has shown that lean asynchronous communication processes can inhibit individual competitive dominance behavior (Montoya-Weiss, Massey, Song, 2001). McGuire, Kiesler, Siegel (1987) found that "computer-mediated discussion contained less argumentation than face-to-face discussion (p.917). Siegel, Dubrovsky, Kiesler, et al. (1986), observed that while decision making took longer than when face-to-face, there was greater equity in computer-mediated discussions, less inhibited behavior, and group decisions tended to be further away from initial individual preferences.

The use of both asynchronous and synchronous communication modes have shown to be useful. Multiple channels of communications such as phone, video conferencing, fax, etc. can increase the depth and breadth of interactions among virtual team members (Gay and Lentini 1995).

3.2. LEADERSHIP AND CONFLICT CHALLENGES

Qureshi and Zigurs (2001) suggest that the greater the degree of virtualization, the greater the need to manage team relationships, share knowledge and coordinate activities. For academic GVTs, where members tend to be peers, leadership functions may be designated from the onset, evolve to be shared, or one researcher may emerge and assume certain leadership activities.

Regardless of how guidance occurs, successful virtual team management is heavily reliant on effective leadership. Teagarden, Von Glinow, Bowen, Frayne, et al. (1995) acknowledged the importance of the quality of the relationships between the researchers as well as the researchers and informants to research success in their comparative study of human resource practices. Likewise, Easerby-Smith and Molina (1999) emphasized the importance of managing research team relations as well as the need for team member adaptability in their comparative study. For academic global teams, in particular, it is important to have clear roles and team consensus regarding methodological choices, data gathering and analysis task allocation, and writing and presentation delegation.

3.3. GROUP COHESION

Group cohesion, defined as group affinity based on shared goals and collective effort, is critical to team success (Wright, Drewery, 2002). Increased interactions, task coordination and cooperation between members enhance cohesion (Gully et al, 1995; Harrison et al, 1998; Wright, Drewery, 2002). That being said, based on personal experience, more effective collaborations involve members who, besides having the requisite research skill-set, are empathetic, responsive, and collegial.

For academics, another determinant of a group's ability to work together is institutional support. Certain universities, faculties, and/or department recognize the value of such collaborations and facilitate cross-cultural, cross-boundary research relations while others provide weak to no support.

4. Conclusion

We now have the technological tools to bridge the academic divide and build far-reaching research relations with far-flung colleagues but – is this sufficient? In this new technological age of academe, it is imperative to better understand how technology and culture influences and shapes our shared research initiatives.

Global business has become adept at using information technology and dispersed team structures to further corporate goals. Like our industry counterparts, scholarly GVTs must develop new patterns of communication, collaboration, knowledge and social exchange to further scholarly discourse and discovery.

We conceptualize that academicians engaged in research collaborations which primarily rely on ICTs experience increased collaboration and coordination problems due to distance, cultural and communication issues (Walsh and Maloney, 2007). . Researching ourselves may be the next step. We can begin by studying our own collaboration histories and initiatives to learn what effects our ability to collaborate effectively with colleagues who are geographically dispersed. In so doing, we may truly bridge the divide and create a global knowledge-sharing research community.

References

- Adler, N. (2002). *International Dimensions of Organizational Behavior* (4th ed.). Cincinnati, Ohio: South-Western College Publishing.
- Akkerman S., Admiraal W., Simons R.J. , & Niessen T. (2006). Considering Diversity: Multivoicedness in International Academic Collaboration. *Culture & Psychology*, 12 (4), 461-485.
- Amabile, T., Patterson, C., Mueller, J., & Wojcik, T. (2001). Academic-practitioner collaboration in management research: A case of cross-profession collaboration. *Academy of Management Journal*, 44(2), 418-431.
- Archibugi D. & Coco A. (2004). International Partnerships for knowledge and academia A comparison between Europe and the USA. *Technovation* 24 (2004), 517-528.
- Argote L. (2005). Reflections on Two Views of Managing Learning and Knowledge in Organizations. *Journal of Management Inquiry*, 14(1), 43-49.

- Carte T.A., Chidambaram L., & Becker A. (2006), Emergent Leadership in Self-Managed Virtual Teams A longitudinal Study of Concentrated and Shared Leadership Behaviors. *Group Decision and Negotiation*, 15, 323-343.
- Cronin B. (2004). Bowling Alone Together: Academic Writing as Distributed Cognition. *Journal of the American Society for Information Science and Technology*, 55(6), 557-560.
- Earley, P.C (1989). Social Loafing and Collectivism: A Comparison of the United States and the People's Republic of China. *Administrative Science Quarterly in Business*, Vol. 34, 565-581.
- Easterby-Smith & M. Malina D. (1999). Cross-cultural collaborative research: Toward Reflexivity. *Academy of Management Journal*, 41(1), 76-87.
- Erez, M., & Earley, P. C. (1987). Comparative analysis of goal setting strategies across cultures. *Journal of Applied Psychology*, 72, 658-665.
- Forman, J. & Markus M.L. (2005). Research on Collaboration, Business Communication, and Technology: Reflections on an Interdisciplinary Academic Collaboration. *Journal of Business Communication*, 42 (1), 78-102.
- Gully S.M., D.J Devine & D.J Whitney (1995). A meta-analysis of cohesion and performance: effects of level of analysis and task interdependence. *Small Group Research*, 26(4), 497-520.
- Harrison, D.A., Price, K.H., Bell, M.B. (1998), "Beyond relational demography: time and the effects of surface- and deep-level diversity on work group cohesion", *Academy of Management Journal*, 41, 96-107.
- McGuire, T., Kiesler, S., & Siegel, J. L. (1987). Group and computer-mediated discussion effects in risk decision making. *Journal of Personality and Social Psychology*, 52, 917-930.
- Montoya-Weiss, M., Massey, A. P., & Song, M. (2001). Getting it Together: Temporal Coordination and Conflict Management in Global Virtual Teams. *Academy of Management Journal*, 44, 1251-1262.
- Pillai, R., & Meindl, J.R. (1998). Context and charisma: A "Meso" Level Examination of the Relationship of Organic Structure, Collectivism, and Crisis to Charismatic Leadership. *Journal of Management*, 24, 643-671.
- Potter, R.E., & Balthazard, P.A. (2002). Understanding Human Interactions and Performance in the Virtual Team. *Journal of Information Technology Theory & Application*, 4, 1-23.
- Qureshi, S. & Ziguers, I. (2001) – Paradoxes and Prerogatives in Global Virtual Collaboration. *Communications of the ACM*, 44(12), 85-88.
- Siegel J. L., Dubrovsky, V., Kiesler, S., & McGuire, T. (1986). Group processes in computer mediated communication. *Organizational Behavior and Human Decision Processes*, 37, 157-187.
- Teagarden, M.B., Von Glinow, M.A., Bowen, D.E., Frayne, C.A., Nason, S., Huo, Y.P. *et al.*, (1995). Toward a theory of comparative management research: An idiographic case study of the best international human resources management project. *Academy of Management Journal*, 38, 1261–1287.
- Walsh, J. P., &Maloney, N.G. (2007). Collaboration Sturcture, Communication Media, and Problems in Scientific Work Teams. *Journal of Computer-Mediated Communication*, 12, 712-732.
- Warkentin, M.E., Sayeed, L., & Hightower, R. (1997). Virtual Teams Versus Face-to-face Teams: An Exploratory Study of a Web-based Conference System. *Decision Sciences*. 28(4), 975-996.
- Wright, N.S., Drewery, G. (2002), "Cohesion among culturally heterogeneous groups", *Journal of American Academy of Business*, 2, 66-72.
- Zakaria, N., Amelinckx, A., Wilemon, D. (2004). Working together apart? Building a knowledge-sharing culture for global virtual teams. *Creativity and Innovation Management*. 13, 15- 29.

- Zakaria, N. Amelinckx, A. Wilemon, D. (2007). Navigating Across Culture and Distance: Understanding Determinants of Global Virtual Team Performance. In V. Sessa and M. London (Eds), *Work Group Learning: Understanding, Improving and Assessing How Groups Learn in Organizations* (pp. 175-192). New York: Psychology Press.